# 19. Cancer of the Kidney

ICD-9 189

### **KEY FACTS**

- On average 174 cancers of the Kidney were registered per year.
- 2 in 3 cases occurred in males.
- 3% male cancers.
- 1% female cancers.
- Lower than expected numbers of males in Western Board area and higher in the Southern Board area.
- Half of cases over age 68 years.

On average, for the period 1993-95, 174 cancers of the kidney were registered each year. Almost two thirds of these (64%) were diagnosed in males. Kidney cancer was the eleventh most commonly diagnosed cancer in males, fourteenth in females. It accounted for almost 3% of male cancers and just over 1% of female cancers. Death certifications were about a third of the number of incident cases.

**Table 49 Summary Statistics** 

	MALES			FEMALES		
Year	1993	1994	1995	1993	1994	1995
INCIDENCE						
Incident Cases	112	125	99	72	47	68
Crude Rate (per 100,000)	14.06	15.59	12.29	8.62	5.60	8.06
Cumulative Risk (0-74) (%)	1.41	1.48	1.19	0.65	0.43	0.69
WASR (per 100,000)	10.78	12.42	9.85	5.97	3.49	5.33
EASR (per 100,000)	15.55	17.63	13.80	8.06	5.00	7.58
% of All Cancers	2.65	2.91	2.44	1.6	1.09	1.58
DATA QUALITY						
Mortality : Incidence Ratio	0.38	0.30	0.48	0.39	0.47	0.35
% Death Certificate Only	6.25	0.00	1.01	4.17	0.00	1.47
% Microscopically Verified	78.57	84.8	77.78	83.33	68.09	77.94
MORTALITY						
Number of Deaths	42	38	48	28	22	24
Crude Rate (per 100,000)	5.27	4.74	5.96	3.35	2.62	2.84
Cumulative Risk (0-74) (%)	0.47	0.48	0.53	0.27	0.19	0.19
WASR (per 100,000)	3.87	3.85	4.53	2.24	1.73	1.61
EASR (per 100,000)	5.81	5.41	6.60	3.01	2.41	2.39
% of All Cancer Deaths	2.22	2.04	2.60	1.61	1.25	1.45

WASR = Rates standardised for age to the World standard population EASR = Rates standardised for age to the European standard population

# Age Profile

Kidney cancer occured mainly in mid to late adulthood (after 50 years), half of the cases occurred in both males and females over the age of 68 years. Peak age specific rates occurred in the 75-79 age group in females and the 85+ age group in males - see Figures 35 and 36.

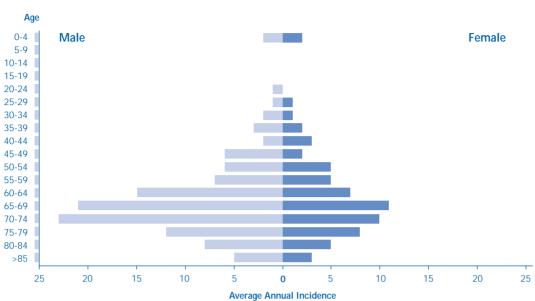
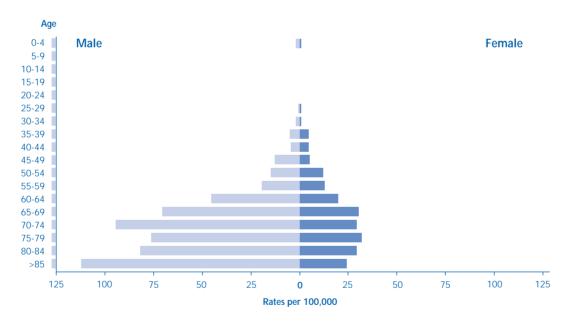


Figure 35 Age Distribution of New Cases 1993-95, Cancer of the Kidney

Figure 36 Average Annual Age Specific Rates (per 100,000) 1993-95, Cancer of the Kidney



# Morphology

About 20% of cases did not have Microscopic Verification. The most common morphology recorded was renal cell carcinoma accounting for 38.4% of all tumours at these sites. The next commonest was transitional cell carcinoma, the slightly higher percentage in these sites in males (20%) than females (13%) may be due to transitional cell carcinoma of the prostate being recoded to urethra. Clear cell carcinoma accounted for about 3% of tumours. Wilm's tumour, a childhood cancer, occurred in less than 1% of cases, more commonly in boys than girls.

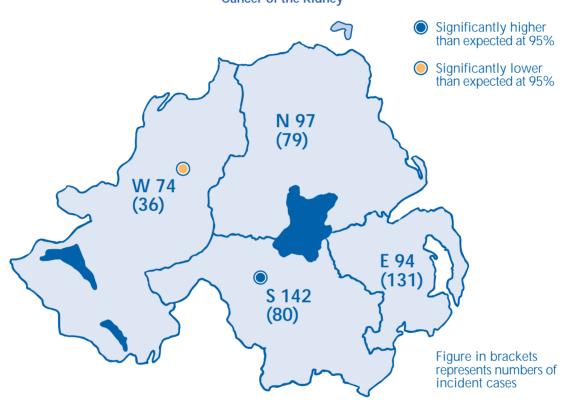
# **Geographical Distribution**

Variation across Health Boards/District Councils in the observed number of cases due to differences in the age structure of the underlying population has been accounted for by using Standardised

Incidence Ratios (SIRs) - see Appendix ii. Values above or below 100 indicate an excess/deficit over what would be expected if that area experienced the same level of incidence as Northern Ireland as a whole.

The Western Board had lower than expected numbers of kidney cancers in males, (based on 36 cases). The Southern Board had a higher than expected number of male cases based on 80 cases over the three year period - see Map 11.

No significant variation at Board level was apparent for females.



Map 11. All Age Standardised Incidence Ratios (SIRs) by District Council 1993-95, Cancer of the Kidney

# **Data Quality**

Data quality improved from 1993 with a very low level of Death Certificate Only (DCO) registrations in 1994 and 1995. The percentage Microscopically Verified fluctuates but was at a respectable level at around 78% in 1995.

## **Comparison with other Countries**

Table 50 provides comparative figures for the number of cases and European Age Standardised Rates for the year 1995.

Table 50 Comparative Numbers and Rates for Britain and Ireland 1995, Cancer of the Kidney

	Ma	les	Females		
Country	Cases	EASR (per 100,000)	Cases	EASR (per 100,000)	
Scotland England & Wales Republic of Ireland	315 2850 117	12.60 10.30 7.70	226 1740 89	6.40 5.00 5.00	
Northern Ireland	99	13.80	68	7.58	

Rates for Northern Ireland were higher than in England & Wales, Scotland and Republic of Ireland in males and females. This pattern accords with the established pattern for mortality in Northern Ireland (ref: 1).

### Comment

A large proportion (probably over a third) of kidney cancers are associated with tobacco use. In Europe the incidence and mortality of renal cancer are generally increasing, though improved survival may have contributed to some divergence in the two trends. Incidence levels are particularly high in France and the Nordic countries.

### For Health Gain

- Actions to reduce smoking levels including:
  - Reducing the numbers who start to smoke by banning advertising, increasing taxation, reducing availability of tobacco products and enhancing health education.
  - Helping those who smoke to stop.
- Increased awareness among the population about the importance of early investigation of symptoms.
- Participation in clinical trials, which can advise on the best outcomes, should be enhanced.
- The organisation of services should be such as to ensure that those with the disease have as good an outcome as possible.
- The full range of palliative care services should be available for those with established disease.